

Comparisons of Job Characteristics

Focus Occupation: [Ship Engineers \(53-5031\)](#)

Associated Occupation: [Marine Engineers and Naval Architects \(17-2121\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 62

Focus Occupation: Ship Engineers (53-5031)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Engineering and Technology	5.7	21.2	13.9	<<	Extensive education and/or training may be required
Design	5.2	17.6	10.8	<<	Extensive education and/or training may be required
Mathematics	9.2	15.8	12.3	<<	Extensive education and/or training may be required
Mechanical	6.8	14.9	21.4	>>	Current knowledge level is likely more than sufficient
Computers and Electronics	8.4	14.4	9.8	<<	Extensive education and/or training may be required
Physics	4.3	13.5	8.0	<<	Extensive education and/or training may be required
Production and Processing	6.0	11.1	6.0	<<	Extensive education and/or training may be required
Building and Construction	4.0	10.6	8.4	<	Expanded education and/or training may be required
Transportation	4.6	8.4	12.4	>>	Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 2

Focus Occupation: Ship Engineers (53-5031)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
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Operations Analysis	5.0	13.8	3.9	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	13.5	10.5	<<	Extensive development of skills in this area may be required
Mathematics	6.2	13.5	4.3	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	12.8	10.0	<<	Extensive development of skills in this area may be required
Science	4.5	11.2	6.7	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	10.7	7.9	<<	Extensive development of skills in this area may be required
Technology Design	2.6	8.1	2.5	<<	Extensive development of skills in this area may be required
Management of Material Resources	3.7	7.7	3.3	<<	Extensive development of skills in this area may be required
Management of Financial Resources	3.3	7.6	2.8	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 69			
Focus Occupation: Ship Engineers (53-5031) Associated Occupation: Marine Engineers and Naval Architects (17-2121)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	16.4	11.1	<<	Extensive improvement in abilities may be required
Oral Comprehension	12.5	16.0	12.9	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	15.6	10.2	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	14.7	10.7	<<	Extensive improvement in abilities may be required
Problem Sensitivity	11.1	14.4	13.3	0	Current ability level may be sufficient
Inductive Reasoning	10.2	14.3	10.3	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	13.6	5.1	<<	Extensive improvement in abilities may be required
Visualization	7.5	13.6	10.7	<<	Extensive improvement in abilities may be required
Number Facility	6.3	12.6	6.0	<<	Extensive improvement in abilities may be required
Originality	7.6	11.8	8.3	<<	Extensive improvement in abilities may be required
Fluency of Ideas	7.6	11.5	7.3	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 85

Focus Occupation: Ship Engineers (53-5031)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Work Activities	Exclusivity of Activity
Assemble, dismantle, or reassemble equipment or machinery	70
Direct and coordinate activities of workers or staff	3
Erect machinery in marine or maritime setting	95
Maintain records, reports, or files	5
Perform safety inspections in transportation setting	62
Read blueprints	10
Read technical drawings	7
Select ship repair method	95

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Ship Engineers (53-5031)

Associated Occupation: Marine Engineers and Naval Architects (17-2121)

Tools and Technologies	Exclusivity
Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.